

OPERATIONS OF THE INTERNATIONAL GPS GEODYNAMICS SERVICE (IGS)

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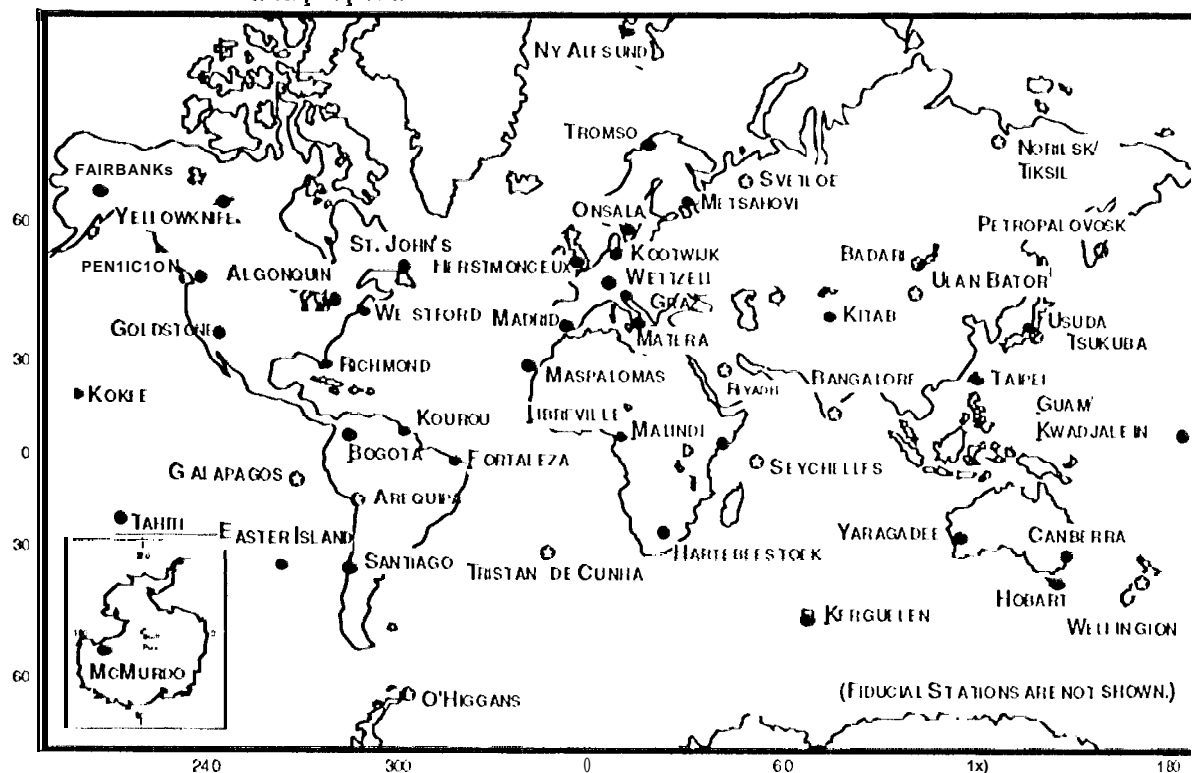
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During the summer of 1992, a major international campaign was conducted to demonstrate network tracking operations, data processing and orbit determination of the Global Positioning System (GPS) satellites. The campaign was the first demonstration of the International GPS Geodynamics Service (IGS), a proposed International Association of Geodesy (IAG) activity. The purpose of the campaign designated IGS '92 was to provide precise (H₀) ephemerides to the geodynamics and geophysical community for high precision applications and to evaluate the performance of critical elements of the IGS. The official campaign period was from June 21 through September 23, 1992. The campaign was highly successful and the various participating agencies agreed to keep up the end-to-end operations as an IGS 'pilot service', which continues today. At the post-campaign workshop convened at the University of Bern, Switzerland in March 1993, the IGS Oversight Committee began preparations of a proposal to the IAG seeking approval for the permanent IGS.

Currently the IGS network system contains nearly 40 global tracking stations, three major data centers; 10 operational or regional data centers; and seven regular analysis centers which ultimately produce not only precise GPS ephemerides, but also contribute Earth orientation parameters to the International Earth Rotation Service (IERS).

This paper will focus on the operations, organization and interfaces of the IGS routine service which is expected to contribute to geodesy for many years to come. It will briefly summarize the history of the IGS, report on IGS '92 campaign activities, and describe the current IGS terms of reference and proposal status.



IGS INTERNATIONAL GPS TRACKING NETWORK
PRECISION P-CODE NETWORK. STATION PROJECTED FOR JANUARY, 1994 •
(UNDERLINED STATIONS TO BE IMPLEMENTED IN 1993)
FUTURE STATION, 1994-1995 ⊗